

- 4 -

Shen et al.
Appl. No. 10/051,447

Remarks

Reconsideration of this Application is respectfully requested.

Claims 3, 7, 8, 12-28 and 30-38 have been canceled. Upon entry of the foregoing amendment, claims 1, 2, 4-6, 9-11, and 29 are pending in the application, with 1 being the independent claim. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Applicants have amended the claims to overcome the Examiner's rejection in order to expedite prosecution. Applicant reserves the right to prosecute broader claims in a continuation application. Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Rejection under 35 U.S.C. § 103(a)

Claims 1-2, 4-6, 9-11, and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Nos. 6,124,650 to Bishop et al ("Bishop") in view of 6,031,652 to Furlani et al. ("Furlani"). Applicants respectfully traverse this rejection.

The present invention is directed at improving an intersection angle of a first magnetic field with an axis of a moveable element (e.g., in some cases a cantilever). For example, through the use of first and second magnetic devices on either side of a moveable element having magnetic material, a magnetic field can be generated which is substantially perpendicular to a long axis of the moveable element, while not requiring exact positioning of the magnets.

Claim 1 recites a device including at least a substrate, a moveable element supported by the substrate and having a magnetic material and a long axis, and first and second magnets that produce a first magnetic field, which induces a magnetization in the magnetic material, the magnetization characterized by a magnetization vector pointing in a direction along the long axis of the moveable element, wherein the first magnetic field is approximately perpendicular to a major central portion of the long axis. The

- 5 -

Shen et al.
Appl. No. 10/051,447

dependent claims recite further details of the first and second magnets and their location with respect to the moveable element.

Both applied patents teach of a system including a substrate (elements 26 and 28 in Bishop and element 14 in Furlani), a single magnet (element 16 or 24 in Bishop and element 50 in Furlani), and a moveable element have magnetic material (elements 12 and 14 or 22 in Bishop and elements 16 and 18 in Furlani). Neither applied patent discusses wanting to improve a directionality of a magnetic field generated by the single magnet used in each. Thus, because the applied patents are not looking to solve the problem addressed by the instant invention, there would be no motivation to combine or modify the applied patents in the manner asserted by the Examiner.

Therefore, neither of the applied patents, either alone or in obvious combination, teach of at least a substrate, a moveable element supported by the substrate and having a magnetic material and a long axis, and first and second magnets that produce a first magnetic field, which induces a magnetization in the magnetic material, the magnetization characterized by a magnetization vector pointing in a direction along the long axis of the moveable element, wherein the first magnetic field is approximately perpendicular to a major central portion of the long axis, as recited in claim 1. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection. Also, at least based on their dependency, claims 2, 4-6, 9-11, and 29 should be found allowable over the applied patents.

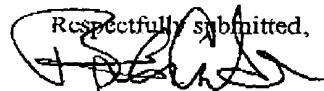
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

- 6 -

Shen et al.
Appl. No. 10/051,447

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.


Respectfully submitted,

Brett A. Carlson
Attorney for Applicants
Reg. No. 39,928

Date: January 12, 2004

Ingrassia Fisher & Lorenz, PC
7150 E. Camelback Road, Suite 325
Scottsdale, AZ 85251
Telephone: 480 385-5060